

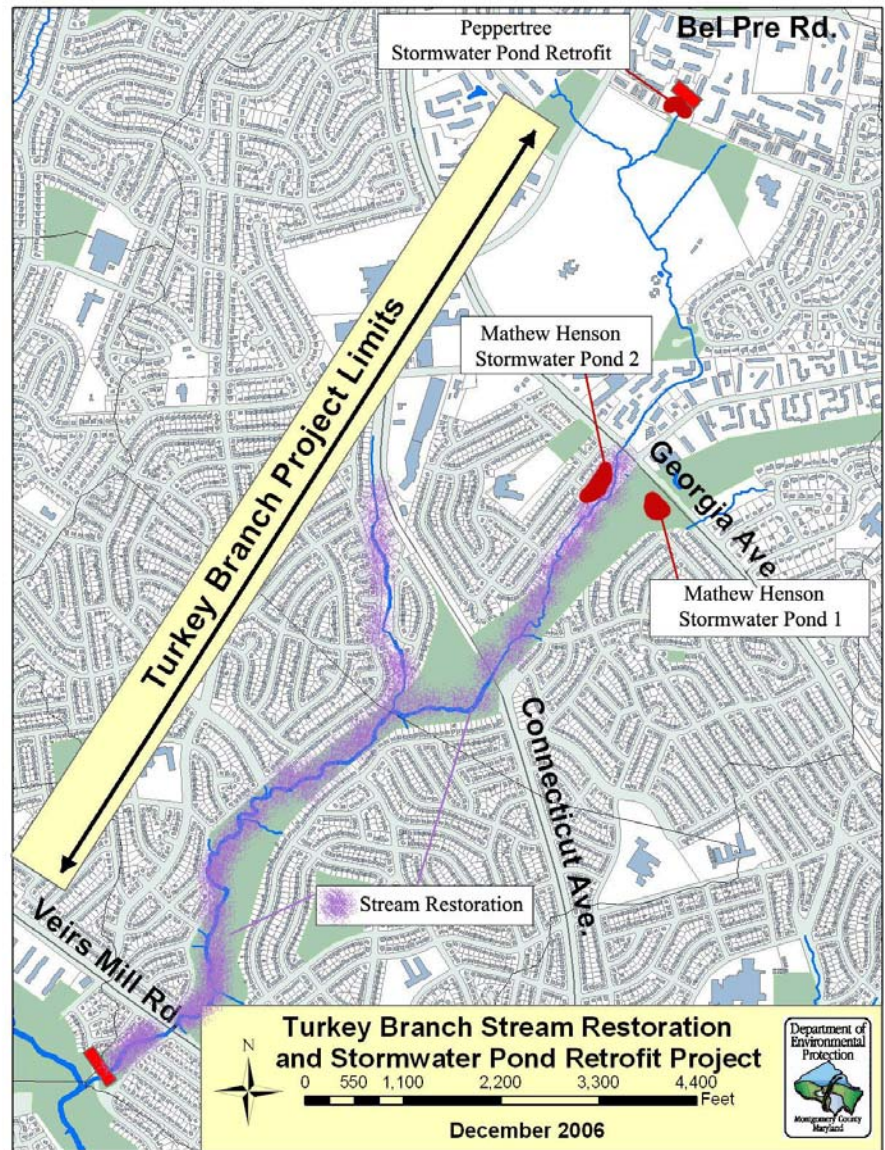
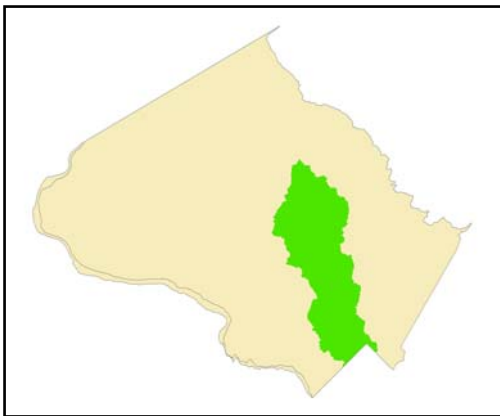
# Turkey Branch Watershed Restoration

## Montgomery County Department of Environmental Protection

<http://www.montgomerycountymd.gov/dep>



County Locator:



### Restoration Goals:

To stabilize eroding streambanks, re-establish a riparian vegetation buffer, protect sewer lines, repair existing stormdrains, capture stormwater flows, and improve aquatic habitat conditions.

### Restoration Areas:

- Peppertree Stormwater Management Pond Retrofit
- Construction of Matthew Henson Stormwater Pond 1 and 2
- Middle and Lower Turkey Branch Stream Restoration Projects

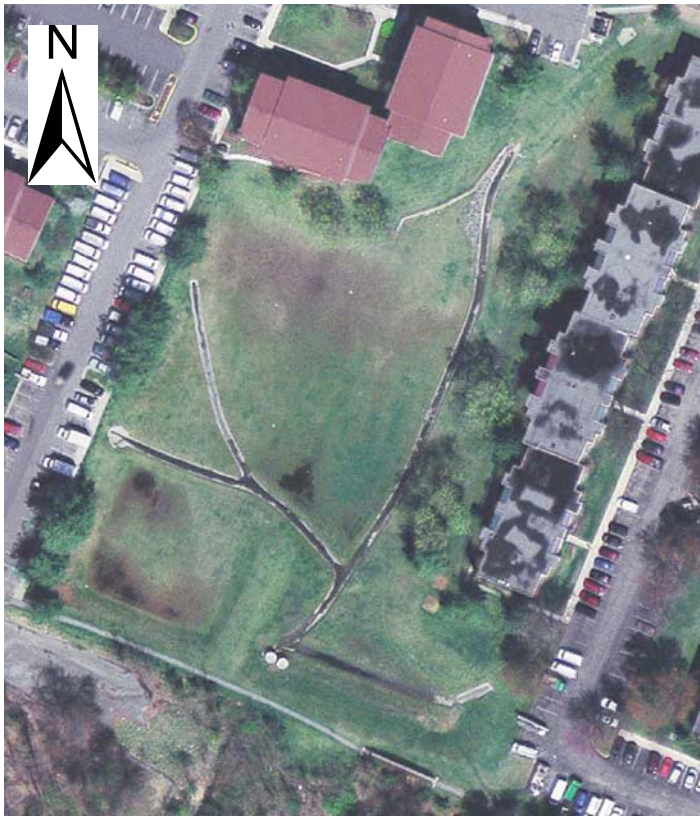


# Peppertree Stormwater Management Pond Retrofit

## Purpose:

The purpose of the stormwater pond retrofit is to modify the pond to improve the stormwater management controls provided by the pond. The proposed work would include minor modification of the existing metal “riser” control structure, the removal of concrete channels and re-grading of the pond area to create a wetland system and corresponding vegetation. The retrofit will reduce stream bank erosion to the receiving stream, improved water quality, create of wetland habitat for amphibians and birds, and result in a more aesthetically pleasing structure for the surrounding community to enjoy.

## Current Conditions:

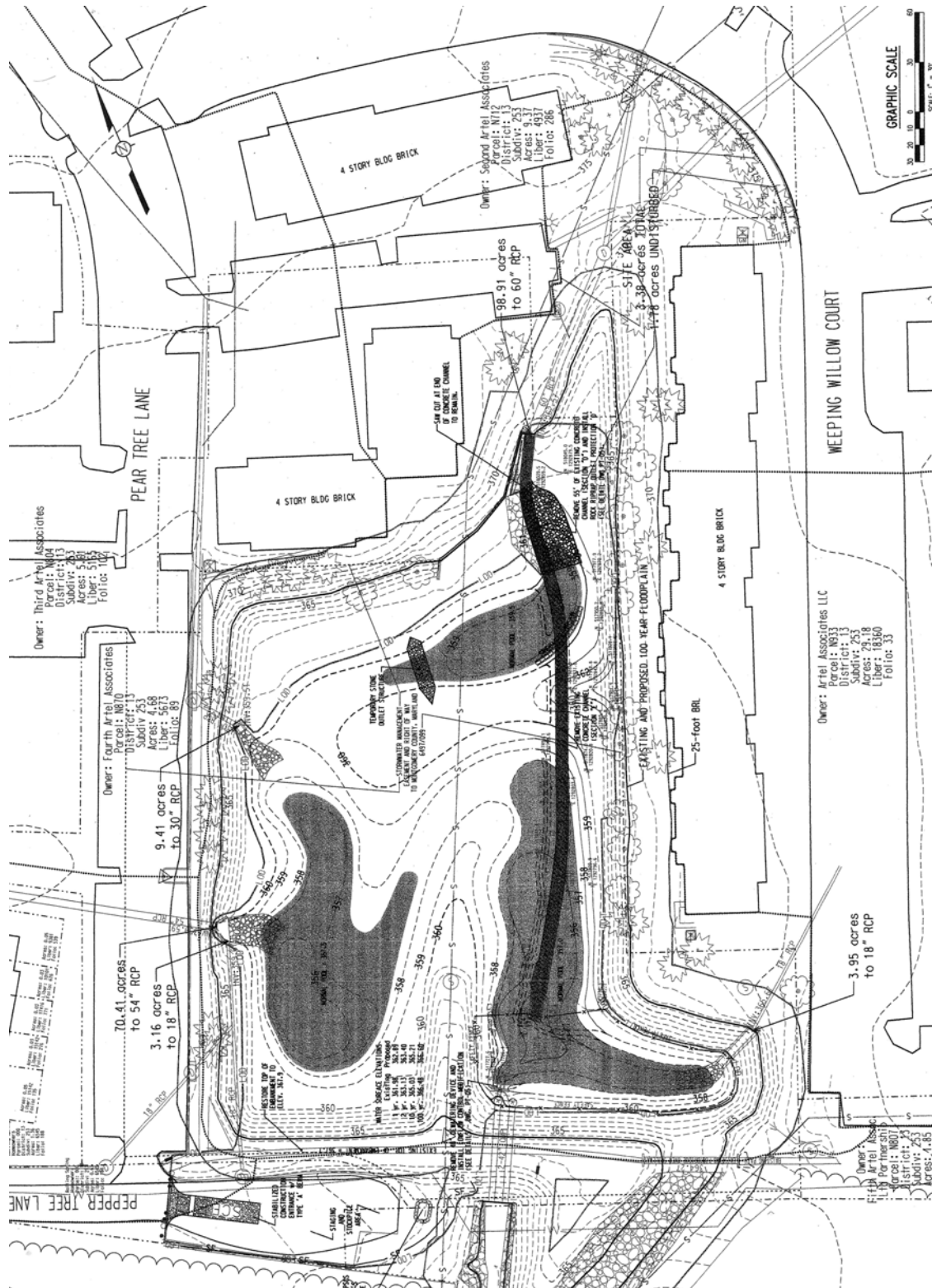


**2006 Aerial Photo**



**Photo of Pond Facing Downstream (South)**

### Pond Retrofitted Plans:





# Mathew Henson Stormwater Management Pond 1 and 2

## Purpose:

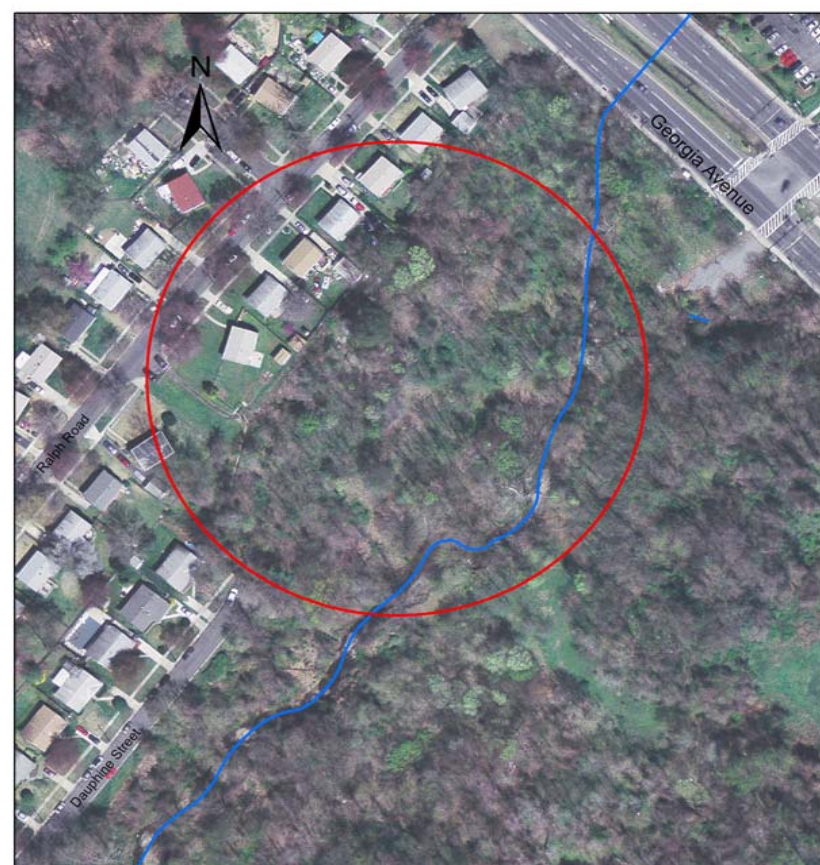
The purpose of constructing the two Mathew Henson stormwater ponds is to capture the excess runoff from Georgia Avenue and the surrounding highly developed neighborhoods. Capturing the intense, uncontrolled stormwater runoff will provide stream bank protection and will most likely lessen flooding further downstream. Both ponds will be constructed on State of Maryland Property in conjunction with Maryland National Capital Park and Planning Commission. Mathew Henson Pond 1 will be constructed on the East side of the Turkey Branch stream while Mathew Henson Pond 2 on the West side of the Turkey Branch Stream. These wet ponds will create wetland habitat that will attract various birds and amphibians for residents to enjoy. The vegetation chosen for these ponds are native to the area and will be aesthetically pleasing.

## Current Conditions for Mathew Henson Pond 1:



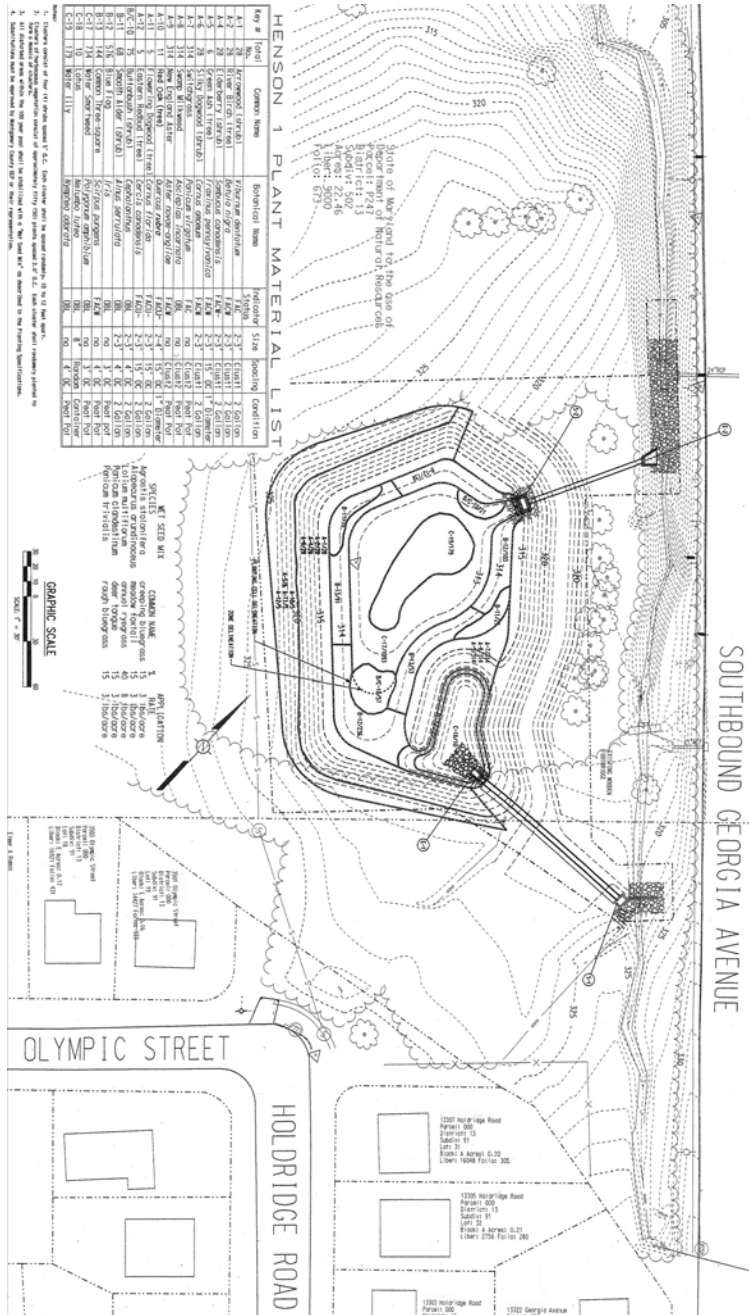
Mathew Henson Pond 1 is an open area located south of Georgia Avenue

## Current Conditions for Mathew Henson Pond 2:

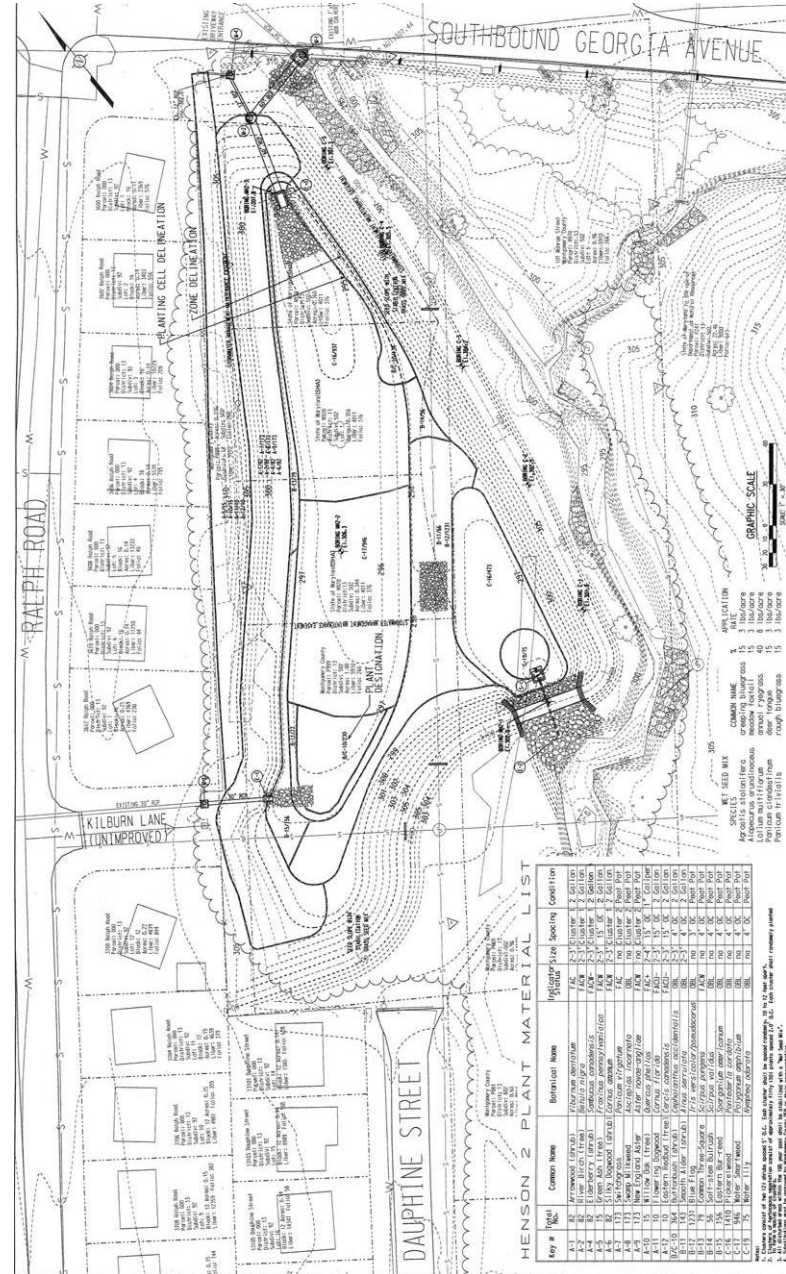


Mathew Henson Pond 2 was the location of a retail nursery which is now owned by State of Maryland and is currently vegetated with pioneering plant and tree species.

## Mathew Henson Pond 1 Plans:



## Mathew Henson Pond 2 Plans:





# Turkey Branch Stream Restoration

## Purpose:

Turkey Branch is typical of heavily urbanized streams and has no significant stormwater controls to capture excess runoff from storm events prior to entering into the stream. This stream looks friendly during dry weather conditions; however, during storm events it has a different appearance altogether. The massive amount of stormwater that flows into Turkey Branch is extremely erosive and threatens properties, streambanks, stream-side trees, sewer crossings, and roads. By capturing some of the stormwater flows using the stormwater ponds (Peppertree, Mathew Henson Pond 1, and Mathew Henson Pond 2), and then stabilizing the streambanks downstream, Montgomery County Department of Environmental Protection (DEP) is addressing the source of the problem as well as the symptoms. This project will be the largest stream restoration project that DEP has conducted and extends from Georgia Avenue south just below Veirs Mill Road, roughly 3.6 miles of stream.

## Current Conditions:





Planned Stream Restoration will include these practices:

## Common Stream Problems



## Solutions



**CROSS VANE**

- Made by connecting vane arms from each bank.
- Provides grade control to prevent further downcutting.
- Redirects stream flow away from unstable banks.
- Forms pools which provide habitat for fish.



**J-HOOK**

- Similar to vanes.
- Also forms pools that dissipate velocity and create habitat.



**RIPARIAN PLANTING**

- Roots prevent erosion and undercutting of banks.
- Groundcover slows runoff, increasing absorption.



**STEP POOL**

- Allows water to flow down a steep gradient without causing additional erosion.
- Helps dissipate or absorb a stream's energy.

Montgomery County Department of Environmental Protection

For more information:

Contact: Don Dorsey, 240.777.7712, [Donald.dorsey@montgomerycountymd.gov](mailto:Donald.dorsey@montgomerycountymd.gov)  
Department of Environmental Protection / Division of Watershed Management  
255 Rockville Pike, Suite 120, Rockville, MD 20850